Request to Archive
With The National Centers for Environmental Information
For AMSU Hydrology CDR
Provided by NESDIS/STAR

2017-04-05

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

1. Who is the primary point of contact for this request?

Ralph Ferraro
NESDIS/STAR
Chief, Satellite Cilmate Studies Branch
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2. Name the organization or group responsible for creating the dataset.

DOC/NOAA/NESDIS/STAR > Center for Satellite Applications and Research, NESDIS, NOAA, U.S. Department of Commerce

3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.

AMSU-A FCDR's - Orbital files that contain geolocated brightness temperatures (TB) at 23, 31, 50 and 89 GHz. There are approximately 1600 scan lines in each orbit with 30 samples across the scan (approximately 50 km spatial resolution). There are about 14 orbits each day.

AMSU-B/MHS FCDR's - As above, but with TB's at 89, 150/157, and 183 (3 bands) GHz. There are 90 samples across the scan (approximately 15 km spatial resolution).

AMSU-A TCDR's - As in first entry, but contains over ocean - total precipitable water, cloud liquid water, sea-ice conentration; over land - surface temperature, snow cover, and surface emissivity (23, 31, 50 GHz).

AMSU-B/MHS TCDR's - As in second entry but contains ice water path, precipitation rate, snow water equivalent (land only).

4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)

From 2000-01-01
Ongoing as continuous updates to the data record

5. Edition or version number(s) of the dataset:

Version 1.0

6. Approximate date when the dataset was or will be released to the public:

2017-04-19

7. Who are the expected users of the archived data? How will the archived data be used?

Science community, in particular, those who would like to merge this data set with others that are similar (e.g., from passive microwave sensors). Looking for global trends in hydrological parameters. Private sector users would include insurance industry (hazard mapping), agriculture and commodity markets, etc.

8. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?

Peer review publications. NCEI funded study for use with hydrological models by insurance industry.

9. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?

This is version 1.0. Would be useful to other CDR's at NCEI such as RSS SSMI, CSU SSMI, PERSIAN rainfall CDR

10. List the input datasets and ancillary information used to produce the data.

FCDRs - Need satellite navigation information
TCDRs - Need AVN/GFS model fields of land/ocean temperature and ocean surface wind speed.

11. List web pages and other links that provide information on the data.

http://cics.umd.edu/AMSU-CDR/home.html

12. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.

1. C-ATBD for: 1. AMSU-A FCDR; 2. AMSU-B/MHS FCDR; 3. TCDR (both AMSU-A and AMSU-B/MHS);
   Metadata contained in the data file, and the metadata convention is CF-1.5, unidata dataset discovery v1.0, NOAA CDR v1.0, GDS v2.0;
   Source code in C and Bash, accompanied with code description and flowchart.

13. Indicate the data file format(s).

1. netCDF-4

14. Are the data files compressed?

netCDF-4/HDF5 compression

15. Provide details on how the files are named and how they are organized (e.g., file_name_pattern_YYYYMM.tar in monthly aggregations).

The filename pattern is
CICS_V00R00_AMSUA_TCDR_MOA_D[YY][DDD]_S[HH][MM][SS]_E[HH][MM][SS]_B[xxxxxxx].nc
The field contains AMSUA can also be AMSUB or MHS;
The field contains TCDR can also be FCDR;
The field contains MOA can also be N15, N16, ... and N19;
The are organized similar to
AMSU-A/FCDR/SAT/YYYY/filename
Note the sensor, CDR type, satellite, and year is subject to change.

16. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?

Available through our FTP site that is linked on our web page (hosted at CICS-MD).

17. What is the total data volume to be submitted?

Historic Data: all historic data or data submitted as a completed collection.

Total Data Volume:	1.2TB
Number of Data Files:	30000

18. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.

Current archive is 2000-2015. The data delivery will be done by the end of 2016, with preliminary data for 2016 and monthly updates thereafter.

19. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location:	College Park, MD
System Name:	cics.umd.edu and cics2.umd.edu
System Owner:	UMD/ESSIC > Earth System Science Interdisciplinary Center, University of Maryland
Additional Information:	Shared computer facility between UMD and NESDIS/STAR

20. What are the possible methods for submitting the data to NCEI? Select all that apply.

1. FTP PULL
2. FTP PUSH
3. SFTP PUSH

21. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.

1. User interface to order and stage data for download
2. Direct download links
3. Advanced web services (e.g., THREDDS Catalog Service)

22. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?

No known constraints apply to the data.

23. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.

The archive of these data is part of the original project under the CDR program. It is a required delivery of the project.

24. Are the data archived at another facility or are there plans to do so? Please explain.

We keep an on-line version at CICS-MD for internal use and beta testing of newer versions by user community.

25. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?

Been in contact with CDR team principles - Brian Nelson, Dan Wunder, Heather Brown, Candace Hutchins. We have a contract with NCEI to deliver this data set.

26. Do you have a data management plan for your data?

It is incorporated within our implementation plan and our work contract with the CDR program

27. Have funds been allocated to archive the data at NCEI?

Assume so as part of the CDR program.

28. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.

Same as project title, it's funded by NCEI's CDR program.

29. Is there a desired deadline for NCEI to archive and provide access to the data?

Archive by:	2016-04-01
Accessible by:	2017-04-19

30. Add any other pertinent information for this request.

None